Project Update: May 2014

The second objective of this project was to determine whether vegetation or microclimate is the best predictor of moth assemblages. We have determined that vegetation is the most important factor for geometrid and arctiine assemblages in this landscape. These moths are positively related to habitat structural complexity and diversity in terms of vegetation, which highlights the importance of maintaining habitat heterogeneity in human dominated landscapes.

We have also identified 16 geometrid and 13 arctiine species that may be used as potential bioindicators for habitat degradation, especially the geometrids, which respond in a more sensitive manner to land use change. These species, as well as other very common species, were included in an identification guide for geometrid and arctiine moths of La Gamba, of which 300 exemplars were printed and distributed in La Gamba community and other interested parties. In addition, two outreach activities were conducted to share the results with others:

1.   Moth exhibitions where offered in Turrialba (one in CATIE university and one in a local school), for people to see the collection of approximately 4,000 moths from La Gamba as well as information about their biology and vulnerability to land use change.

        A talk and workshop was offered for the La Gamba community, including landowners and members of several local organizations, where the results and implications for conservation of the study were shared and the identification guide was distributed amongst the participants.

Articles:

http://www.crhoy.com/cultivos-de-palma-africana-amenazan-vida-de-mariposas-nocturnas-u1n5n6x/

http://www.dicyt.com/noticias/estudian-la-diversidad-de-las-mariposas-nocturnas-de-costa-rica

http://catie.ac.cr/es/noticias-catie/entry/innovadora-investigacion-de-mariposas-en-el-catie